

VORLICEK, J.

B-12

Czechoslovakia/ Physical Chemistry - Electrochemistry

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 11369

Author : Sekerka I., Vorlincek J.  
Title : Study of Corrosion. I. Polarographic Investigation of Metal Corrosion

Orig Pub : Korrosionsstudium. I. Ein Beitrag zur polarographischen Verfolgung  
der Metallkorrosion.  
Sb. chekhofl. khim. rabot, 1954, 19, No 6, 1335-1338 (German)

Abstract : See RZhKhim, 1956, 50381

1/1

ACC NR: AP6022440

(A)

SOURCE CODE: CZ/0078/66/000/003/0015/0015

INVENTOR: Dokoupil, S. (Engineer; Prague); Polivka, V. (Engineer; Prague); Vorlichek, J. (Engineer; Prague)

ORG: none

TITLE: Connecting device. CZ Pat. No. PV 928-64, Class 21

SOURCE: Vynalery, no. 3, 1966, 15

TOPIC TAGS: radioactivity, radioactivity measurement, nuclear radiation detection,  
PULSE SIGNAL, RADIATION DETECTING DEVICEABSTRACT: A connecting device for transferring signals from the pulsed detectors of a radioactive device is proposed. It is distinguished by the following: the output from the detecting probe is provided with a radioactive-radiation detector having a pulsed signal of a certain polarity, and the output, from the detecting probe is provided with a radioactive-radiation detector having a pulsed signal of an opposite polarity. The input and output are connected to the cable input which, either at one or both ends, is matched by a characteristic resistance equalling the characteristic impedance of the cable. The cable output is connected both to the input of the evaluating circuit for evaluating the pulsed signals of a polarity and to the input of the evaluating circuit for evaluating the pulsed signals of an opposite polarity. Eight items of the patent's subject matter follow. Registered, February 19, 1964  
(PV 928-64).

SUB CODE: 18/ SUBM DATE: 19Feb64/

Card 1/1

Distr: 4E2b(v)/4E3c 2 cys/4E3d

19

✓ Corrosion resistance of metals in organic reactor coolants  
Jan Vondráček and Vladimír Šeifert (Elipovice, Nati. Co.,  
Prague). *Jaderná energie* 6, 46-8(1960).—The corrosion  
of steel, stainless steel, Al, Cu, brass (58% Cu), Zr, and Ti  
in molten Ph<sub>3</sub> in an inert Ar atm. at 200-300° for 250-1500  
hrs., and of stainless steel, Al, Ti, and Zr in methylsilicone  
oil at 300° for 500 hrs. in an inert Ar atm. was found to be  
below the specified limit, and uniform over the sample area.

4  
1-25  
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// Tests were made in the absence of radiation.  
H. Newcombe

11

act.

Vorlizek, Jan

Formation of hydrogen peroxide on mechanically stressed  
metals in aqueous medium Vlastimil Štefan, Karel  
Lánsky, J. Štěpánková, J. Vojtěchovský

4

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1D. 8300  
21.1300  
21(4,9)

66016

CZ/38-60-2-3/22

AUTHORS: Vorlíček, Jan, Seifert, Vladimír

TITLE: ~~Corrosion Resistance of Metals in Organic Reactor Cooling Media~~

PERIODICAL: Jaderná Energie, 1960, Nr 2, pp 46 - 49

ABSTRACT:  
This article is a description of experiments regarding the corrosive effects of certain reactor cooling media on metals used for reactor construction. The author begins with a review of experiments performed at the OMRE (US) reactor with polyphenyl compounds, and the corrosion effects of diphenyl.<sup>1</sup> In explaining the own experiments which aimed to establish the corrosive effects of diphenyl and the resistance of Czech-made reactor construction materials, the author first describes the materials used for the tests. They were selected on the basis of past experience and with a view to construction and economic considerations. They were steel containing 0.28% carbon (ČSN 11,500), stainless steel AKVS (ČSN 17,264) and AKVN (ČSN 17,241). The samples were sheets of 12 cm<sup>2</sup>, 1.5 mm thick. No other corrosive elements were considered in these tests. The metal samples were exposed to melted diphenyl of 98%; argon gas was used. A description is also given of the equipment employed, such as a 900 w electric oven. The corrosion was determined

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CZ/38-60-2-3/22

Corrosion Resistance of Metals in Organic Reactor Cooling Media

by the loss of weight expressed in  $\text{g/m}^2$  per day. The tests lasted from 250 to 1,500 hours, at temperatures of 200 to 300°C. The results of these tests are given in Table Nr 1: Corrosion ranges from -0.007 to +0.008  $\text{g/m}^2$  per day. Besides these experiments there were also informative experiments conducted with copper and brass which were exposed to melted diphenyl for 250 hours under 300°C. The results are likewise listed in Table Nr 1: Corrosion is 0.000 and +0.000  $\text{g/m}^2$  per day. The author concludes that the process of the diphenyl effect is its oxydation into phenol which becomes the main corrosive agent. Another series of experiments was conducted with methyl-silicone oil for which stainless steel AKVS was used. The samples were exposed to the solution for 500 hours at 300°C, under internal argon atmosphere. The results (Table Nr 2) have shown that the corrosive effects were limited. The author emphasizes that all experiments were performed in the absence of radioactivity which changes the corrosive properties of both media.

Card 2/3

66016

CZ/38-60-2-3/22

Corrosion Resistance of Metals in Organic Reactor Cooling Media

There are: 2 diagrams, 2 tables and 17 references, 12 of which are American, 2 German, 2 Czechoslovak, and 1 French.

ASSOCIATION: Výzkumný ústav železorudných dolů a hrudkoven Ejpovice, n.p., Praha  
(Research Institute of the Iron Ore Mines Ejpovice), Prague

Card 3/3

BIAZEK, Josef, inz., C.Sc.; VORLICEK, Jindrich, inz.; KUTHAN, Josef,  
inz.; DURKOVIC, Oto, inz.

Automation of liquid feeding of swine. Zemedel tech 8 no.6:395-  
412 D '62.

1. Vysoka skola zemedelska, katedra elektrizace a vnitropod-  
nikove mechanizace, Praha.

Vondrák, J.

✓ The Formation of Hydrogen Peroxide on Metals Subjected to  
Stresses in Aqueous Media. V. Čížek, K. Šmejkal, J. Vondrák,  
and I. Šebeková. (Materiálové Listy, 1955, 10, 110-1100).  
[In Czech]. On the basis of experiments described, the  
authors conclude that the formation of hydrogen peroxide  
on iron as well as on glass is facilitated by ultrasonic pulses  
originating in slip. — P. S.

4

VORLICEK, Jan, RNDr.; VYDRA, Frantisek, inz. CSc.

Direct determination of iron (III) in ores. Sbor Vyzk  
ust Mnisek 4:229-232 '64.

1. Research Institute of the Zelenorudne doly a hrudkovny National Enterprise, Mnisek (for Vorlicek).
2. Institute of Polarography, Czechoslovak Academy of Sciences, Prague (for Vydra).

VORLICEK, Jan; SWIFERT, Vladimir

Corrosion resistance of metals in the organic reactor coolants.  
Jaderna energie 6 no.2:46-49 F '60.

1. Vyzkumy ustav zelezorudnych dolu a hrudkoven Ejpovice, n.p.,  
Praha (for Vorlincek)

VORLICEK, M.

Probabilistic character of the safety problem of structures. p. 298

APLIKACE MATEMATIKY (Ceskoslovenska akademie ved. Matematicky ustav)  
Praha, Czechoslovakia

Vol. 4, no. 5, 1959

Monthly list of East European Accessions (EEAI) LC. VOL. 9, no. 1 January 1960

Uncl.

VORLICEK, M.

TECHNOLOGY

PERIODICAL: ARCHIWUM INŻYNIERII LĄDOWEJ Vol. 4, no. 4, 1958

VORLICEK, M. Statistical methods for the determination of the homogeneity of concrete. p. 537.  
Vol. 10, no. 6, 1958.

Monthly List of East European Acquisitions (EEAI) LC, Vol 8, no. 4.  
April 1959, Unclass

TICHY, Milik, inz., CSc.; VORLICEK, Milos, inz., CSc.

Mathematical statistics in the theory of building structures.  
Stav cas 12 no.1:3-17 '64.

1. Stavební ustav, České vysoké učení technické, Praha.

TICHY, Milik; VORLICKY, Milos

Statistical method of calculating eccentrically loaded reinforced concrete sections. "Ozpravy techn. CSAV" '74 no. 5:1-59 '64.

TICHY, Milik, inz. CSc.; VORLICEK, Milos, inz. CSc.

Principles of the statistical theory of safety of elements  
stressed by shear and bending. Stav cas 12 no. 31165-179 '64

1. Institute of Building, Czech Higher School of Technology,  
Prague.

TICHY, Milik, Ing., C.Sc.; VORLICEK, Milos, Ing., C.Sc.

Statistical calculations of sections and structures in reinforced and prestressed concrete. Acta techn Cz 6 no.2:186-202 '61. (EEAI 10:6)

1. Academie Tchecoslovaque des Sciences, Institut de la Mecanique  
Theorique et Applique.  
(Reinforced concrete) (Prestressed concrete)

VORLICEK, M.

TECHNOLOGY

Periodical ACTA TECHNICA. Vol. 3, no. 6, 1958.

VORLICEK, M. Analyzing results of cube-strength tests of concrete. In French. p. 436.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 3, March, 1959. Uncl.

CZECHOSLOVAKIA / Chemical Technology. Chemical Products and Their Application--Ceramics. H-13  
Glass. Binding Materials. Concrete

Abs Jour: Ref Zhur-Khimiya, No 3, 1959, 9143

Author : Vorlichek, M.

Inst : Not given

Title : Determination of Concrete Uniformity

Orig Pub: Stavebn. casop., 1958, 6, No 3, 183-194

Abstract: To determine cubical resistance and the coefficient of concrete uniformity, it is necessary to know the distribution of strength. Distribution of cubical strength is expressed satisfactorily by the Person curve. --Author's abstract

Card 1/1

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CZECHOSLOVAKIA/Chemical Technology. Chemical Products and  
Their Application. Part 2. - Ceramics. Glass.  
Binders. Concretes - Binders, Concretes and  
Other Silicate Building Materials.

H

Abs Jour: Referat. Zhurnal Khimiya, No 21, 1958, 71601.

Author : Milos Vorlick.

Inst :

Title : Application of Statistics to Determination of  
Compression Strength of Concrete.

Orig Pub: Acta techn. (Ceskosl.), 1958, 3, No 2, 121-165.

Abstract: No abstract.

Card : 1/1

VORLICEK, Milos, inz., C.Sc.

Effect of extent of stressed zone on strength of the material. Acta  
techn Cz 8 no.2:149-176 '63.

1. Institute of Theoretical and Applied Mechanics, Czechoslovak  
Academy of Sciences, Praha 6 - Dejvice, Solinova 7.

VORLICHEK, M. [Vorlicek, M.] (Praga, Chekhoslovakiya); TIKHY, M. [Ticha, M.]  
(Praga, Chekhoslovakiya)

Effect of variable rigidity during bending on the distribution of  
moments in continuous beams. Stroi. mekh. i rasch. soor. 2 no.5:  
11-14 '60.

(MIRA 13:9)

(Girders)

TICKY, Milik, inz. CSc.; VORLICEK, Milos, inz. CSc.

Statistical theory of interaction diagrams. Acta techn Cz  
9 no.1:51-66 '64.

1. Institute of Building Research, Technical University of  
Prague, Praha 6 - Dejvice, Solinova 7.

VORLICEK, V.

"Prblm of the fuel galvanic cell."

ENERGETIKA, Praha, Czechoslovakia, Vol. 5, no. 1, Jan. 1955

Monthly List of East European Accessions Index (EEAI), Library of Congress,  
Vol. 8, No. 8, August 1959

Unclassified

VORLICHEK

CZECHOSLOVAKIA / Chemical Technology. Corrosion & Its H  
Prevention.

Abs Jour: Ref Zhur-Khimia, No 12, 1958, 40013.

Author : Seifert, Vorlichek, Smrchek, Sekerka.

Inst : Not given.

Title : An Apparatus for Studying the Corrosion in Liquids  
that are Circulating in Very Aggressive Media.

Orig Pub: Chem. listy, 1957, No 5, 986-987.

**Abstract:** To investigate the rate of corrosion of metals in liquids that are circulating in aggressive media, a glass apparatus (from Simax glass) was constructed. It was equipped with a pump to provide the speed of 70 liters/minute, and was heated with glycerin or oil to obtain high temperatures (approx. 300°C). This apparatus makes it possible to measure the conductivity, pH and polarographic analysis of

Card 1/2

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CZECHOSLOVAKIA / Chemical Technology. Corrosion & Its H  
Prevention.

Abs Jour: Ref Zhur-Khimiya, No 12, 1958, 40013.

Abstract: dissolved metals continuously. The material under investigation is placed into glass tubes of various diameters, and which can be removed without interruption. The apparatus was tested on the study of Al stability in water containing H<sub>2</sub>S and its condensate. It was also tested during studies of continuous Zn-plating of rapidly moving strips.

Card 2/2

TIMHIY, M. [Ticky, M.], inzh., kand.tekhn.nauk; VORLICHEK, M. [Vorlicek,M.],  
inzh., kand.tekhn.nauk

Statistical calcualtion of elements of ordinary and prestressed  
reinforced concrete. Bet.i zhel.-bet. 8 no.9:425-427 S '62.  
(MIRA 15,12)

1. Institut teoretichekoy i prikladnoy mekhaniki Chekbozovatskoy  
Akademii nauk.

(Precast concrete)

WEISS, Vladimir, inz. C.Sc.; TANNENBAUM, Marcel, inz.; TICHY, M., inz., C.Sc.;  
VORLICEK, M., inz., C.Sc.

Effect of prestressed reinforcement in the pressed sectional area  
on the load-capacity variability; discussion. Stav cas 11 no.3:  
240-244 '63.

1. Ustav teoreticke a aplikovane mechaniky, Ceskoslovenska akademie  
ved, Praha (for Weiss).; 2. Ustav stavebniho vyzkumu a stavebni  
ekonomiky, Bukurest (for Tannenbaum).

TIKHIY, M., inzh., kand.tekhn.nauk; VORLICHEK, M., inzh., kand.tekhn.nauk

Statistical calculation of cross sections of ordinary and  
prestressed reinforced concrete. Bet. i zhel.-bet. 8 no.6:284-287  
(MIRA 15:7)  
Je '62.

1. Institut teoreticheskoy i prikladnoy mekhaniki Chekhoslovatskoy  
Akademii nauk.  
(Precast concrete)

SCHMIDT, Lubos; MAIER, Jan; KARAMAN, Ladislav; VORLICKOVA, Bozena

Evaluation of foreign sugar beet varieties according to the  
results of variety tests in Czechoslovakia in the years 1956-  
1963. Listy cukrovar 81 no.1:2-11 Ja '65.

1. Submitted July 6, 1964.

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001860810015-1

SCHMIDT, Lubos; VORLICKOVA, Bozena; FEKETE, Pavel

Report on the test of seeds of sugar beet varieties in 1963.  
Listy cukrovar 80 no.9;225-239 S '64.

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001860810015-1"

VORLOVA, Gana

Problems of the women who make our clothes and shoes. Vsem. prof.  
(MIRA 15:12)  
dvizh. no.11:35-37 N '62.  
(Women—Employment)

PUDLAK, P.; VORLOVA, Z.; STARA, I.; DEIMLOVA, E.

Coagulation properties of tissue thromboplastin from the viewpoint  
of control of anticoagulant therapy. Cas. lek. cesk. 101 no.22:695-  
700 1 Je '62.

1. Ustav hematologie a krevni transfuze, Praha, prednosta prof. dr.  
J. Horejsi.

(ANTICOAGULANTS therapy)  
(THROMBOPLASTIN chemistry)

VORLOVA, Z.; RYBIN, Z.

Osteolysis of the proximal end of the humerus in a patient with  
hemophilia B. Acta chir. orthop. trauma. Czech. 28 no.4:370-374  
Ag '61.

1. II ortopedicka klinika v Praze, prednosta prof. dr Hnevkovsky --  
Klinicke oddeleni ustavu hematologie i krevni transfuze v Praze,  
prednosta prof. dr J. Horejsi.  
(HEMOPHILIA compl.) (HUMERUS diseases)

JADRNY, L., MUDr.; technicke spoluprace: VORLOVE, K.

Simple modification of paper partition electrophoresis with a  
minimal investment and expenditure in clinical practice. Cas.  
lek. cesk. 95 no.5:128-132 3 Feb 56.

1. Z interni kliniky (prednosta doc. Dr. K. Bobek) a z ustrelnich  
laboratori (prednosta doc. Dr. A. Mecl).

(ELECTROPHORESIS,  
inexpensive modification. (Cz))

VORONIN, B.A.

ANDON'YEV, V.I.; BAUM, V.A.; BAUMGARTEN, H.K.; BEREZIN, V.D.; BIRYUKOV, I.K.;  
BIRTUKOV, S.M.; BLOKHIN, S.I.; BOROVYI, G.A.; BULEV, M.Z.; BURAKOV,  
N.A.; VERTSAYER, B.A.; VOLK, G.M.; VORMAN, B.A.; VOSCHCHININ, A.P.;  
GALAKTIONOV, V.D., kand. tekhn. nauk; GENKIN, Is.M.; GIL'DENBLAT,  
Ya.D., kand. tekhn. nauk; GINZBURG, M.M.; GLUBOV, P.S.; GODES, E.G.;  
GORBACHEV, V.N.; GRZHIB, B.V.; GREEKULOV, L.F., kand. s.-kh. nauk;  
GRGDZHENSKAYA, I.Ya.; DANILOV, A.G.; DMITRIYEV, I.G.; DMITRIYENKO,  
Yu.D.; DOBROKHOTOV, D.D.; DUBININ, I.G.; DUNDUKOV, M.D.; ZHOLIK,  
A.P.; ZIMKEVICH, D.K.; ZIMAROV, Ye.V.; ZIMASKOV, S.V.; ZUBRIK, K.M.;  
KARANOV, I.F.; KHIAZIN, S.N.; KOLEGAYEV, N.M.; KOMAROVSKIY, V.T.;  
KOSENKO, V.P.; KORENSTOV, D.V.; KOSTROV, I.N.; KOTLIARSKIY, D.M.;  
KRIVSKIY, M.N.; KUZNETSOW, A.Ya.; LAGAR'KOV, N.I.; LOALOV, V.G.;  
LIKHACHEV, V.P.; LOGUNOV, P.I.; MATSEKOVICH, K.F.; MEL'NICHENKO,  
K.I.; MENDLEVICH, I.R.; MIKHAYLOV, A.V., kand. tekhn. nauk;  
MUSIYINA, R.N.; NATANSON, A.V.; NIKITIN, M.V.; OVES, I.S.;  
OGUL'NIK, G.R.; OSIPOV, A.D.; OSMER, N.A.; PETROV, V.I.; PERYSHKIN,  
G.A., prof.; P'YANKOVA, Ye.V.; RAPOORT, Ya.D.; REMEZOV, N.P.;  
ROZANOV, M.P., kand. biol. nauk; ROCHEGOV, A.G.; RUBINCHIK, A.M.;  
RYBACHEVSKIY, V.S.; SADCHIKOV, A.V.; SEMENTSOV, V.A.; SIDENKO, P.M.;  
SINYAVSKAYA, V.T.; SITAROVA, M.N.; SOSNOVIKOV, K.S.; STAVITSKIY,  
Ye.A.; STOLYAROV, B.P. [deceased]; SUDZILOVSKIY, A.O.; SYRTSOVA,  
Ye.D., kand. tekhn. nauk; FILIPPSKIY, V.P.; KHALTURIN, A.D.;  
TSISHEVSKIY, P.M.; CHERKASOV, M.I.; CHERNYSHOV, A.A.; CHUSOVITIN,  
N.A.; SHESTOPAL, A.O.; SHOKHTER, P.A.; SHISHKO, G.A.; SHCHEBINA,  
I.N.; ENGEL', F.F.; YAKOBSON, A.G.; YAKUBOV, P.A., ANKHANGEL'SKIY,

(Continued on next card)

ANDON'YEV, V.L.... (continued) Card 2.  
Ye.A., retsenzent, red.; AKHUTIN, A.N., retsenzent, red.; BALASHOV,  
Yu.S., retsenzent, red.; BARABANOV, V.A., retsenzent, red.; BATUNER,  
P.D., retsenzent, red.; BORODIN, P.V., kand. tekhn. nauk, retsenzent,  
red.; VALUTSKIY, I.I., kand. tekhn. nauk, retsenzent, red.;  
GRIGOR'YEV, V.M., kand. tekhn. nauk, retsenzent, red.; GUBIN, M.F.,  
retsenzent, red.; GUDAYEV, I.N., retsenzent, red.; YERMOLOV, A.I.,  
kand. tekhn. nauk, retsenzent, red.; KARAULOV, B.F., retsenzent,  
red.; KRITSKIY, S.N., doktor tekhn. nauk, retsenzent, red.; LIKIN,  
V.V., retsenzent, red.; LUKIN, V.V., retsenzent, red.; LUSKIN, Z.D.,  
retsenzent, red.; MATRIOSOV, A.Kh., retsenzent, red.; MENDELEYEV,  
D.N., retsenzent, red.; MENGEL', M.F., doktor tekhn. nauk, retsenzent,  
red.; OBREZKOV, S.S., retsenzent, red.; PETRASHEN', P.N., retsenzent,  
red.; POLYAKOV, L.M., retsenzent, red.; HUMYANTSEV, A.M., retsenzent,  
red.; RYABCHIKOV, Ye.I., retsenzent, red.; STASEKOV, N.G., retsen-  
zent, red.; TAKANAYEV, P.F., retsenzent, red.; TARANOVSKIY, S.V.,  
prof., doktor tekhn. nauk, retsenzent, red.; TIZDEL', R.R., retsen-  
zent, red.; FEDOROV, Ye.M., retsenzent, red.; SHIVYAKOV, M.N.,  
retsenzent, red.; SHMAKOV, M.I., retsenzent, red.; ZHUK, S.Ya.  
[deceased], akademik, glavnnyy red.; HUSSO, G.A., kand. tekhn. nauk.  
red.; FILIMONOV, N.A., red.; VOLKOV, L.N., red.; GRISHIN, M.M., red.;  
ZHURIN, V.D., prof., doktor tekhn. nauk, red.; KOSTROV, I.N., red.;  
LIKACHEV, V.P., red.; MEDVEDEV, V.M., kand. tekhn. nauk, red.;  
MIKHAYLOV, A.V., kand. tekhn. nauk, red.; PETROV, G.D., red.; RAZIN,  
N.V., red.; SOBOLEV, V.P., red.; FERRINGER, B.P., red.; FREYGOFER,

(Continued on next card)

ANDON'YEV, V.L.... (continued) Card 3.  
Ye.F., red.; TSYPLAKOV, V.D. [deceased], red.; KORABLIHOV, P.N.,  
tekhn. red.; GENKIN, Ye.M., tekhn. red.; KACHEROVSKIY, N.V., tekhn.  
red.

[Volga-Don; technical account of the construction of the V.I. Lenin  
Volga-Don Navigation Canal, the Tsimlyansk Hydroelectric Center,  
and irrigation systems] Volgo-Don; tekhnicheskii otchet o stroitel'-  
stve Volgo-Donskogo sudokhodnogo kanala imeni V.I. Lenina, TSIM-  
LYANSKOGO gidrouzla i orositel'nykh sooruzhenii, 1949-1952; v piati  
tomakh. Moskva, Gos. energ. izd-vo. Vol.1. [General structural  
descriptions] Obshchee opisanie sooruzhenii. Glav. red. S.IA. Zhuk.  
Red. toma M.M. Grishin. 1957. 319 p. Vol.2. [Organization of con-  
struction. Specialized operations in hydraulic engineering] Orga-  
nizatsiya stroitel'stva. Spetsial'nye gidrotekhnicheskie raboty.  
(Continued on next card)

ANDON'YEV, V.L.... (continued) Card 4.  
Glav. red. S.IA. Zhuk. Red. toma I.N. Kostrov. 1958. 319 p.  
(MIRA 11:9)  
1. Russia (1923- . U.S.S.R.) Ministerstvo elektrostantsii. Byuro  
tehnicheskogo otcheta o stroitel'stve Volgo-Dona. 2. Chlen-kor-  
respondent Akademii nauk SSSR (for Akhutin). 3. Deystvitel'nyy  
chlen Akademii stroitel'stva i arkhitektury SSSR (for Grishin,  
Razin).  
(Volga Don Canal--Hydraulic engineering)

VORMA, I.A.

BC

Absorption of fatty acids on silica gel and its transparency. A. V. Kiselev, I. A. Vorma, V. V. Kiseleva, V. N. Kornenechaya, and N. A. Schelkovitch (*J. Phys. Chem.*, 1942, 16, 43-44).—The decrease of adsorption on  $\text{SiO}_2$  gel of fatty acids from non-polar solvents with increase in the length of C chain, which is the reverse of the usual adsorption behaviour on "activated" charcoal (a hydrophobic adsorbent), is a result of its transparency and not, as Holmes and McCalvey (A., 1936, 118) supposed, of its hydrophilic character alone. This view is supported (i) by analogy with the conclusions of other workers on the behaviour of charcoal possessing extremely fine pores (cf., e.g., Bell and Phillips, A., 1934, 1067; Dubinina and Javerina, A., 1936, 1384), (ii) by results of experiments on adsorption, from  $\text{CCl}_4$  solution, of  $\text{AcOH}$  (I) and stearic acid (II) on samples of  $\text{SiO}_2$  gel previously ignited to 200° (III), 445°, and 500° respectively, and (iii) by special treatment of Harwell and Fu's data (A., 1929, 387) for adsorption on  $\text{SiO}_2$  gel of the first four fatty acids from  $\text{CCl}_4$  solution. The experiments confirm that adsorption is the less the higher is the temp. of ignition, the adsorption of (II) being affected < that of (III). This is attributed to the gradual closing-up of the pores in consequence of the progressive loss of structural  $\text{H}_2\text{O}$ .  $\text{SiO}_2$  gel in its most active state (200) is supposed to consist of particles of polymerised silicic acid separated by pores already so fine that the entry of large mole., e.g., of (II), is more difficult than that of small mole., e.g., of (I). The transparency effect makes calculations of sp. surface difficult, but a rough evaluation in the case of (III) gives  $3.4 \times 10^4$  sq. cm. per g.

(I. S. S.)

## ASA-ELA METALLURGICAL LITERATURE CLASSIFICATION

CA VORONOV, I. H.

J

Adsorption of fatty acids on silica gel and its ultraporosity. A. V. Kiselev, I. A. Voronov, V. V. Kiseleva, and N. A. Shtokvish. *J. Phys. Chem. (U.S.S.R.)* 19, 83-91 (1945).—The adsorption of AcOH, propionic acid, and stearic acid from  $\text{CCl}_4$  at room temp. on  $\text{SiO}_2$  gel is less the higher the temp.  $T$  of dehydration of the gel. The vol. of AcOH and stearic acid adsorbed at satn. (extrapolated for AcOH) are nearly identical for  $T = 48^\circ$  and  $80^\circ$ ; 1 g. of  $\text{SiO}_2$  takes up 0.12-0.14 cc. of acid if  $T$  was  $48^\circ$  and 0.085-0.083 cc. if  $T$  was  $80^\circ$ . Also the expt. of Beretti and Pu (*C.A.* 39, 3412) show that the vol. adsorbed is independent of the acid. The "inversion of Träuble's rule" observed in the adsorption by  $\text{SiO}_2$  gel is due to its ultraporosity, which also makes impossible a calcn. of the specific surface of the adsorbent. For a  $\text{SiO}_2$  gel of  $T = 200^\circ$  which adsorbs a larger vol. of stearic acid than of AcOH this surface is about  $3 \times 10^6$  sq. cm./g.

J. J. Ilkerman

## ASA-ISA-METALLURGICAL LITERATURE CLASSIFICATION

## CLASSIFICATION

VORMS, V. V. (Engr.) and POROSHENKOV, G. A. (Engr.)

"The Organization and Technical Side of the Measures Taken in Leningrad  
for the Decrease of the Danger of Corrosion in Underground Buildings at the  
Source of Stray Currents."

report presented at the Odessa Conference on the Fighting of Corrosion Caused  
by Stray Currents, Nov 1957. Odessa Branch NTOEP (Elektrichestvo, '58, 4:83)

VORNA, ZBIGNIEW

POLAND/Cultivated Plants. Potatoes. Vegetables. Melons

M-5

Abs Jour : Ref Zhur - Biol., No 1, 1958, No 1572

Author : Zbigniew Vorna

Inst : Poznan Higher Agricultural School

Title : The Utilization of Sewer Water for the Fertilization of Vegetables.

Orig Pub : Przegl. ogrodn., 1956, 33, No 6, 14-17

Abstract : In the vegetable cultivation department of the Poznan Higher Agricultural School the action of the fermented sediment of sewer water with a water content of 47.3%, 17.4% of organic matter, 33.3% ash, 0.61% of aggregate N, 0.48% of P<sub>2</sub>O<sub>5</sub> and 0.26% of K<sub>2</sub>O was studied in connection with tests on tomatoes and late cabbage. On a 4 year average the increase of the tomato crop with 60 tons per hectare of manure was 24.2%, and with 60 tons per hectare of sediment 29.7%; the increase in the cabbage harvest using both forms of fertilization amounted to 27%. The increase of sediment doses up to 150 t/h decreased the yield of both crops. The application of sediment had

Card : 1/2

VORONEZH, V. D.

YUROVSKII, V. D., CHIKOV, A. II., and LOKHOBAYA,  
N. V. RAPID DETERMINATION OF SILICA IN CARBONATED  
DOLOMITES AND CLAYS BY DECOMPOSITION WITH CONcen-  
TRATED HYDROCHLORIC ACID UNDER PRESSURE. *Zh. zid.*  
Zh. Lab. T. 17(37):10 (1961). "A complete decomposition  
with quantitative separation of  $\text{SiO}_2$  was effected at 250°  
in 30 min. with dolomites and limestone and in 1.5 hr.  
with clays. The losses of  $\text{SiO}_2$  in filtration do not exceed  
those of  $\text{SiO}_2$  obtained by the decomposition with alkali  
carbonates." RAPID DETERMINATION OF PURE SILICA IN  
NIKROV REACTORS BY USING CORRECTIVE COMPLICANTS  
IN INSOLUBLE RESIDUA. *Izv. SSSR* 19-21.

6

MAGUREANU, E., conf.; GROHNICU, Minn, dr.; MUSATESCU, M., dr.; RADU, I., dr.; VORNICESCU, M., technician.

Comparative study of adenoviral antibodies with the passive hemagglutination test and complement fixation test. Microbiologia (Bucur.) 9 no.4:351-358 Jl-Ag '64

1. Lucrare efectuata in Institutul de microbiologie, parazitologie si epidemiologie "Dr. I. Cantacuzino".

VORIN, N.I., kand.tekhn.nauk, dotsent.

Investigating the effect of methods of machining and pressing parts  
on their fitness for repeated couplings. [Trudy] MVTU no.78:55-83  
(MIRA 11:10)  
'58.

(Metalwork) (Couplings)

VORNIKOV, G. S.

Textile Fabrics - Testing

Dynamometric testing of textile materials. Tekst.prom. 12 No. 7 1952.

9. Monthly List of Russian Accessions, Library of Congress, October 1956, Unclassified.  
2

CZECHOSLOVAKIA

BIRIUKOV, K.P; VORNKOV, M.O.

Institute of Organic Synthesis, Academy of Sciences,  
Latvian, SSR (Institut organicheskogo sinteza,  
Akademii nauk Latviiskoi, SSR), Riga, USSR (for  
both)

Prague, Collection of Czechoslovak Chemical Communica-  
tions, No 2, February 1967, pp 830-842

"Nuclear quadrupolar resonance, induction effect  
and conjugation of geminal substitutes in organic  
chlorine-containing compounds."

VORNOV, A. G.

"Geographical Zonality of Biotic Relations"

report to be submitted for the Intl. Geographical Union, 10th General Assembly  
and 19th Intl. Geographical Congress, Stockholm, Sweden, 6-13 August 1960.

SOKOLOVA, S.M.; STAROSTIN, B.A.; SHATALINA, M.S.; KRESHTAPOVA, V.N.;  
SKVORTSOV, A.K.; GOLYSHEVA, M.D.; DUNDIN, Yu.K.; PODLPSKII, G.I.;  
SEKODA, A.M.; DONSKAYA, T.N.; MURTAZANOVA, E.Sh.; LOBACHEV, V.S.;  
VORNOV, A.G.; SKOKOVA, N.N.

Brief news. Biul.MOIP.Otd.biol. 70 no.5:130-131 S-0 '65.  
(MIRA 18:12)

VORNOV, F.D.; BEGEYEV, A.M.; DIKSHTEIN, Ye.I.; TRIFONOV, A.G.; KAZAROV  
A.I.; KOPOLEV, A.I.; BORODIN, G.I.; ANTIPIN, V.G.; KULAKOV, L.M.;  
KOZHANOV, M.G.; GAZNUR, V.F.

Investigating the operation of 400-ton open-hearth furnaces  
following redesign. Stal' 22 no.10:904-907 01'62. (MIRA 15:10)

1. Magnitogorskiy metallurgicheskiy kombinat i Magnitogorskiy  
gorno-metallurgicheskiy institut.  
(Open-hearth furnaces)

VORNOVITSKIY, I.; SERAFIN, O.

Popularization of advanced practices. Stroi.truboprov. 8 no.7:38  
J1 '63. (MIRA 17:2)

VORNOVITSKIY, I.N., inzh.; MAZEL', A.G., kand. tekhn. nauk; ZASKO, F.A.,  
inzh.; BLAGOVESHCHENSKAYA, V.V., inzh.

The VSTs-1 cellulose-coated electrodes for the welding of pipe-lines. Svar. proizv. no.3:18-20 Mr '64. (MIRA 18:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po stroitel'stvu magistral'nykh truboprovodov (for Vornovitskiy, Mazel').
2. Gosudarstvennyy nauchno-issledovatel'skiy institut po gazovoy promyshlennosti SSSR (for Zasko). 3. Leningradskiy zavod im Zhdanova (for Blagoveshchenskaya).

VORNOVITSKY, I.N., inzh.; SBARSKAYA, N.P., inzh.; GRINEVICH, K.P., kand.  
tekhn. nauk

Waterproofing the coatings of gas-shielded electrodes.  
(MIRA 18:10)  
Svar. proizv. no.10:23-25 O '65.

23326

S/095/61/000/001/004/004  
A053/A129

1.2300 also 1573

AUTHORS: Vornovitskiy, I. N., Zasko, F. A., Engineers, Mazel', A. G.,  
Candidate of Technical Sciences

TITLE: Gas-shielded ВСЦ -1 (VSTs-1) electrodes for fast welding of main  
pipelines without supporting rings

PERIODICAL: Stroitel'stvo truboprovodov, no. 1, 1961, 28 - 30

TEXT: Electrodes of the УОНИ-13/55 (UONI-13/55) type with a calcium fluoride coating are largely employed in the construction of pipelines. These electrodes are unsuitable, however, for field work for various reasons explained in the article. The Welding Laboratory of VNIIST has developed VSTs-1 electrodes with a gas shield coating made on the base of cellulose -MgO-SiO<sub>2</sub>-TiO<sub>2</sub> which permit the welding of the first layer to be carried out in a downward direction at a rate of 25 - 30 m/h, which is twice the rate compared to the work done with UONI-13/55 electrodes. The greater speed is due to a 20 - 25% increase in the bead-coefficient and to the fact that the new electrodes have a diameter of 4 instead of 3 mm which permits the current to be raised by 20 - 30% and a thinner seam to be obtained by welding downward. The quickly crystallizing seam gives a

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S/095/61/000/001/004/004  
A053/A129

Gas-shielded BCu -1 (VSTs-1) electrodes ...

thin porous crust of easily removable slag. One of the great advantages of the new electrodes consists in their great fusing capacity which permits welding to be carried out in any spatial position without supporting rings. Welding with VSTs-1 electrodes is done with d-c of reverse polarity. The following welding currents are recommended for various positions: 120 - 170 amp for down welding, 120 - 150 amp for vertical welding and 120 - 150 amp for overhead welding. Welding with maximum current requires skill and training. Electrodes should burn up evenly from beginning to end, while the seam of the following electrode should overlap that of the former by 10 - 15 mm. In the course of production the electrodes are tempered at 80 - 90°C, which temperatures should not be exceeded when drying in the field. The metal fused on by VSTs-1 electrodes satisfies the requirements for 3 42 (E 42) type electrodes according to ГОСТ 2523-60 (GOST-2523-60) the average mechanical properties of the seam in combination with МCr3(MSt.3) steel are: tensile strength 45.2 kg/mm<sup>2</sup>, relative elongation 30.1%, relative tapering 68.7%, toughness 14.3 kg/cm<sup>2</sup>. The chemical composition of the fused-on metal indicates that the gas medium which is developed during the fusion process, is a reliable protection from air penetration (the contents of nitrogen being about 0.001%). In view of the fact that VSTs-1 electrodes correspond to E42 type they can only be used for welding of the first layer without supporting ring. Second

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23326

S/095/61/000/001/004/004

A053/A129

## Gas-shielded BCu-1 (VSTs-1) electrodes ...

and third layers have to be welded with electrodes of 350A (E50A) type (UONI-13/55). The article refers for the sake of comparison, also to electrodes of foreign origin, such as Flectweld-5 and Shieldarc-85. The article describes tests performed by SMU-12 on the pipeline Krasnodarskiy kray - Serpukhov in the presence of representatives of VNIIST. Ye. M. Rogova, senior scientific coworker, R. P. Burlakova, and F. D. Sharapov, Engineers; and of SMU-12 S. K. Avakyan, L. F. Smetyuk, O.I. Dorofeyev, A. M. Dvoryadkin, Engineers; A. D. Gorshkov, F. D. Gorshkov and A. I. Babich, electric welders. The results confirmed the advantages of the VSTs-1 electrodes over other types. Examination of welded joints by the magnetographic and gamma-ray methods revealed the absence of defects, while results of mechanical tests satisfied the requirements as stipulated by TY (TU) standards. The utilization of the new electrodes for the first welding layer permits the output of welded joints to be increased on 1,020-mm pipes per shift by 25%, while the cost of welding per joint in case of VSTs-1 electrodes is 8 rubles less than the cost of the same work performed with UONI-13/55 electrodes. Steps should be taken to start mass production of the new electrodes on the Zavod im. Zhdanova (Plant imeni Zhdanov) in Leningrad, which is the principal supplier of electrodes for welding pipelines. There is 1 graph and 2 photographs.

Card 3/3

VORNOVITSKIY, I.N., inzh.; YAMPOL'SKIY, V.M., inzh.

Remote control of the welding current. Svar.proizv. no.1:33 Ja '62.  
(MIRA 15:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut tverdykh splavov.  
(Electric welding)(Remote control)

VORNOVITSKIY, I.N., inzh.; MAZEL', A.G., kand.tekhn.nauk

Investigating electrodes with a gas shielding cellulose covering.  
Svar. proizv. no.2:12-14 F '62. (MIRA 15:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut tverdykh  
splavov.

(Electrodes)  
(Protective atmospheres)

VORNOVITSKY, I.N., inzh.; MAZEL', A.G., kand. tekhn. nauk; SBARSKAYA, N.P.,  
inzh.

Calculated method of determining the quantity of electrode  
coatings for arc welding. Svar. proizv. no.4:10-12 Ap '65.  
(MIRA 18:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po stroitel'-  
stvu magistral'nykh truboprovodov.

VORNOVITSKY, I.N.; LADYZHINSKIY, P.B.

~~APPROVED FOR RELEASE: 03/14/2001~~

CIA-RDP86-00513R001860810015-1

Improvement of welding techniques in East Germany, Czechoslovakia,  
and Poland. Biul.tekh.-ekon.inform. no.1:93-96 '61. (MIRA 14:2)  
(Germany, East—Welding) (Czechoslovakia—Welding)  
(Poland—Welding)

MAZEL', A.G.; VORNOVITSKIY, I.N.; TARLINSKIY, V.D.

Effect of heat generation in the arc on metal melting during  
welding. Avtom. svar. 15 no.12:32-40 D '62. (MIRA 16:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po  
stroitel'stvu magistral'nykh truboprovodov.  
(Electric welding) (Heat—Transmission)

STROYEV, V.S., inzh.; VORNOVITSKIY, I.N., inzh.

Electrodes for the welding of scale-resistant steel. Svar.  
proizv. no.8:1-4 Ag '62. (MIRA 15:11)

1. Opytnyy svarochnyy zavod Mosgorsovnarkhoza.  
(Steel--Welding) (Electrodes)

23284  
S/135/61/000/007/007/012  
A006/A106

[2300 also 1573

AUTHORS: Vagapov, I. M., Vornovitskiy, I. N., Engineer

TITLE: High-efficiency electrodes with iron powder in the coating and peculiarities of their fusion

PERIODICAL: Svarochnoye proizvodstvo, no. 7, 1961, 22-24

TEXT: Electrodes with iron powder coatings have been developed and came into extended use abroad; their efficiency exceeds by 1.5-2 times that of conventional electrodes of equal diameter (Ref. 1-4: Kauhausen, E., Kalsmacher, P., Adamski, F., "Werkstatt und Betrieb" (Shop and Production) no. 10, 1958; Mathias, D. L., "Canadian Welder" no. 8-9, 1957; Mathias, D. L., "Welding Journal" no. 4, 1955; Smith, D. C., Rinehart, W. G., Helton, D. C., "Welding Journal" no. 4, 1956). Multiple attempts of developing domestic electrodes of this type were unsuccessful due to the lack of iron powder production and insufficient knowledge on processes and factors determining the efficiency of the welding process. The authors present results of investigating the effect of the amount and size of iron powder grains in the coating of rutile-acid and basic electrodes on changes in the fusion characteristics of the electrodes. To determine the latter it was

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S/135/61/000/007/007/012  
A006/A106**High-efficiency electrodes ...**

necessary to introduce two coefficients instead of one general coefficient of fusion, namely a) the coefficient of fusion of the rod  $\alpha_{fr} = \frac{G_r}{I_t} g/a-h$ , where  $G_r$  is the weight of the molten rod;  $I$  is the welding current and  $t$  is the time of burning of the arc; and the coefficient of fusion of the electrode  $\alpha_{fr} = \frac{G_r}{G_r g_{i.p.}}$

It  $\frac{g}{a-h}$ , where  $g_{i.p.}$  is the weight of iron powder in the molten part of the coating. The coefficient of loss was calculated by formula

$$\psi = \left( 1 - \frac{n}{G_r g_{i.p.}} \right) \cdot 100\%, \text{ where } G_n \text{ is the weight of built-up metal.}$$

The iron powder was produced by reduction and had the following chemical composition: 0.15% C; 0.45% Mn; 0.13% Si; 0.034% S; 0.032% P, 98.3% Fe. The results of determining fusion characteristics of the basic type electrodes with iron powder coatings are given in Fig. 1. The effect of the grain size and composition of the powder was studied by analogous tests and on the basis of results obtained, preliminary requirements to the grain composition of reduced iron powder for electrode coatings were developed (Table 2). It was found that the size of the iron powder grains affected considerably the fusion characteristics of the electrodes: The coefficient of fusion and building up and the rate of electrode

Card 2/5

3/155/61/000/001//001/vic  
A006/A106

High-efficiency electrodes ...

fusion increased with larger grain size. It was established that optimum fusion characteristics can be assured by introducing into the coating greater amounts of coarse iron powder, by selecting optimum thickness of the coating and at higher current densities; the idle run voltage of transformers should be over 60 v. On the basis of the experimental results two types of highly efficient electrodes were developed: the acid-type O3C-3 (OZS-3) and the basic type BH-48U (VN-48U) electrodes with 16-18 and 14-16 g/a-h building-up coefficients respectively. The coefficient of the weight of the coating is within 120 - 170% and the electrode diameter is by about twice as large as the rod diameter. The new electrodes can be used for welding low carbon and low alloy steels in lower position. Highest efficiency of the electrodes is achieved by welding over 6 mm thick metal, long seams, and hardfacing large volumes. Common characteristics of the electrodes are: welding at high current values, easy arc excitation, high welding and technological characteristics, such as good removability of the slag, fine-scaled formation of built-up metal and relatively low splashing. The authors thank Engineers Ye. V. Sokolov and A. D. Rakhmanov for their assistance. Technician Ye. A. Kochervina and Engineer I. A. Fishbeyn participated in the work. There are 3 tables, 3 figures and 11 references: 7 Soviet-bloc and 4 non-Soviet-bloc.  
ASSOCIATION: Orytnyy svarochnyy zavod Mosgorsovarkhоз (Experimental Mosgorsovarkhоз Welding Plant)

Card 3/5

VORNOVITSKIY, I. N. (Engineer) (VNIIst)

"High-speed welding of first layer of seam of joints of pipe lines using gas-  
protective electrodes"

Report presented at the regular conference of the Moscow city administration NTO  
Mashprom, April 1963.  
(Reported in Avtomaticheskaya Svarka, No. 8, August 1963, pp 93-95, M. M. Popekhin)

JPRS24,651 19 May 64

VORNOVITSKIV, I.N., inzh.; ZASKO, F.A., inzh.; MAZEL', A.G., kand.tekhn.  
nauk

VSTS-1 gas-protecting electrodes for rapid welding of pipelines  
without using backing rings. Stroi. truboprov. 6 no. 1:28-30  
(MIRA 14:2)

Ja '61.

(Pipelines--Welding) (Electrodes)

VORNOVITSKIY, I.N.

STROYEV, V.S., inzhener; VORNOVITSKIY, I.N., inzhener

Welding St.5 armature steel at temperatures below freezing. Svar.  
(MLRA 8:12)  
proizv. no. 10:11-13 0'55.

1. Opytnyy svarochnyy zavod TSentral'no nauchno-issledovatel'skogo  
instituta Ministerstva putey soobshcheniya  
(Steel--Welding)

Vornovitskiy, I. N.

AID P - 5592

Subject : USSR/Engineering

Card 1/2 Pub. 107-a - 4/12

Authors : Stroyev, V. S., Eng. and I. N. Vornovitskiy, Eng.

Title : Effect of metallurgical factors on structure and mechanical properties of the 18-8 welded metal.

Periodical : Svar. proizv., 11, 15-19, N 1956

Abstract : The authors describe the metallographic, chemical and gasesous analysis of the 18-8 type (OKh18N9, 1Kh18N9T and 1Kh18N9B stainless steel) welds made with the TsL-2 and TsL-3 electrodes carried out at the Experimental Welding Plant of the Central Scientific Research Institute of the Ministry of Railways (TsNII MPS) to find the causes of the diminishing strength and plasticity of the welded metal, as well as to ascertain the mechanism of its decreasing strength formation. Four tables, 3 photos (6 micro-pictures), 1 graph,

AID P - 5592

Svar. proizv., ll., 15-19, N 1956

Card 2/2 Pub. 107-a - 4/12

1 drawing; GOST standards; 10 Russian references  
(1945-55), and 6 foreign references (1946-54).

Institution : As above

Submitted : No date

VORNOVITSKIY, I.N.

Electrodes with cellulose coating for welding main pipes. Biul.tekh.-  
ekon.inform. Gos.nauch.-issl.inst.nauch.i tekhn.inform. 17 no.7:33-34  
Jl '64. (MIRA 17:10)

VAGAPOV, I.M., inzh.; VORNOVITSKIY, I.N., inzh.

Highly efficient electrodes with iron powder and coatings  
and their melting characteristics. Svar. proizv. no. 7:22-25  
(MIRA 14:6)  
J1 '61.

1. Opytnyy svarochnyy zavod Mosgorsovnarkhoza.  
(Electric welding—Equipment and supplies)

S/135/62/000/002/002/010  
A006/A101

AUTHORS: Vorovitskiy, I.N., Engineer, Mazel', A.G., Candidate of Technical Sciences

TITLE: Investigation of electrodes with gas-shielded cellulose coating

PERIODICAL: Svarochnoye proizvodstvo, no. 2, 1962, 12 - 14

TEXT: To determine the possibility of developing gas-shielded cellulose coating with a high amount of ЭЦ (ETs) cellulose, tests were made with experimental electrodes. Ten layers were built up to determine the chemical composition and gas saturation of the built-up metal and plates were welded to establish the mechanical properties. Changes in the chemical composition of the built-up metal were determined as a function of the cellulose-manganese-ore ratio and the cellulose-hematite ratio in the coating and the calcination temperature of cellulose. It was found that the minimum level of ETs cellulose, at a weight factor of the coating of about 20%, should be 25-30% to assure reliable gas shielding of the welding pool against the effect of air. Cellulose is not the source for the saturation of the weld metal with carbon, at a correctly selected composition of the coating and 120°C electrode roasting temperature. Then the carbon concen-

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8/135/62/000/002/002/010  
A006/A101

Investigation of electrodes ...

tration in the built up metal can be assured within 0.08 - 0.12%. An increase of the roasting temperature over 120 - 150°C may entail a higher carbon content and impair the quality of the built-up metal. There are 4 tables, 4 figures and 4 references: 1 Soviet-bloc and 3 non-Soviet-bloc.

ASSOCIATION: VNIIST

Card 2/2

VORNOVITSKII, I.N.; VAGAPOV, I.M.; KRIUKOVSKIY, N.N., inzh.,  
retsentent; STEPANCHENKO, N.S., red.izd-va; TSAREVA,  
T.N., tekhn. red.

[High-duty electrodes for arc welding] Vysokoproizvodimy-  
tel'nye elektrody dlia dugovoi svarki. Moskva, Mashgiz,  
1963. 102 p. (MIRA 16:11)  
(Electric welding—Equipment and supplies)

VYGODSKIY, Mark Yakovlevich; VORNOVITSKIY, M.Ya., red.; RYVKIN, A.Z.,  
red.; YERMAKOVA, Ye.A., tekhn. red.

[Handbook on elementary mathematics; tables, arithmetic, algebra,  
geometry, trigonometry, functions, and graphs] Spravochnik po ele-  
mentarnoi matematike; tablitsy, arifmetika, algebra, geometriia,  
trigonometriia, funktsii i grafiki. Izd.14. Moskva, Fizmatgiz,  
1962. 420 p. (MIRA 15:12)

(Mathematics—Tables, etc.)

BC

A-4

## METALLURGICAL LITERATURE CLASSIFICATION

1980 JOURNAL  
BIBLIOGRAPHY OF THE  
ARTS

**APPROVED FOR RELEASE: 03/14/2001**

CIA-RDP86-00513R001860810015-1"

VORNYANS'KIY, M.P.

Overhung scraper conveyer for stockbreeding farms. Mekh. sil'.  
hosp. 8 no.9:10-11 S '57. (MLRA 10:9)

1. Starshiy naukoviy spivrotitnik UMDIMMSG.  
(Conveying machinery)

VSEUKRAINS'KIY, M.P.

Factors of traction in railroad car shunting Kyiv, Vyd-vo Vseukrains'koi  
Akademii nauk, 1934 53p. (50-48089)

TF592.V67

1. Railroads--switching

RUMYNSKIY, Lev Zimonovich; VORNOVITSKIY, M.Ya., red.; RYVKIN, A.Z.,  
red.; MIKHLIN, E.I., tekhn.red.

[The slide rule] Schetnaia lineika. Moskva, Fizmatgiz, 1963.  
(MIRA 17:4)  
63 p.

MITROPOL'SKIY, Aristarkh Konstantinovich; VORNOVITSKIY, M.Ya., red.

[Short mathematical tables] Kratkie matematicheskie tablitsy.  
Iza.3. Moskva, Nauka, 1965. 93 p. (MIRA 18:4)

LUPESCU, A., ing.; VOROBCIUC, O., ing.; TOPA, N., ing.

New bridges in the city of Bucharest. Rev transport 8 no. 3:  
93-99 Mr '61.

1. Director tehnic la Institutul de proiectare "Proiect  
Bucuresti" (for Lupescu).

VOROBCIUC, O., ing.

The prefabricated bridges made of prestressed reinforced concrete with pretensioned reinforcing over the Dimbovita River, regularized below Bucharest. Rev. transport 9 no. 83325-332 Ag '62.

VOROBCIU\$, O.

RECHNOLGY

Periodical: REVISTA CONSTRUCTILOR SI A MATERIALELOR DE CONSTRUCTII.  
Vol. 10, no. 11, Nov. 1958

A prestressed-reinforced-concrete bridge for the narrow-gauge railroad  
over the Moldava River to be constructed at Roman. p. 519.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 53  
May 1959, Unclass.

March

KUZNETS, N.M., prof. [deceased]: BOGDANOVICH, S.N., dotsent; LEVKOWSKIY, N.M., kand. med. nauk; SEMENOVA, V.N.; GLUKHEN'KIY, B.T.; YUKI, M.M.; OSADCHIY, Ye.D.; BARABASH, M.Ye.; VIL'CHINSKIY, S.P.; VITER, I.S.; VOROBETS, I.I.; GRABOVSKAYA, R.A.; RAKHMATULLINA, M.G.; SALOVA, O.V.

Treatment of lupus eruthematosus with phthivazid. Vrach. delo no.4:  
373-378 Ap '59. (MIRA 12:7)

1. Kiyevskiy meditsinskiy institut.  
(LUPUS)(ISONICOTINIC ACID)

"APPROVED FOR RELEASE: 03/14/2001

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L11295-1  
ED. 12. BN/17. /BDS AFFTC/ASD HQ-L WH  
S 120/63/000/002/039/041

AUTHOR: Usov, Yu. P. and Vorob'ev, G. A.

TITLE: Selection of material for windows in chambers used for investigation of discharges in gases under pressure

PERIODICAL: Pribory i tekhnika eksperimenta, March-April 1963, v. 8, no. 2, 177-178.

TEXT: The article describes tests performed on various ultraviolet-transmitting materials in order to find out whether they could be used as windows in chambers for investigation of discharges in gases under pressure. Test results show that glass is not suitable for this purpose. Quartz is good, while quartz glass is best at 0.418 mm of thickness. It is not necessary to use all conditions when maximum ultraviolet-transmission is not necessary. There are four figures.

ASSOCIATION: Nauchno-issledovatel'skiy institut yadernykh issledovanii elektroniki i radiofiziki (Scientific Research Institute for Nuclear Electronics and Radiophysics) of the USSR Academy of Sciences. Institute

SUBMITTED: January 16, 1962  
Card 1/1 ja/CA

VOROBEV, I.

More intensive poultry raising on state farms.

P. 21 (PADOMJU LATIJAS KOLCHOZNIIEKS) Riga, Latvia Vol. 9, No. 7, July 1957

SO: Monthly Index of East European Accessions (AEFI) Vol. 6, No. 11 November 1957.

*Vorobev, N.E.*

USSR/Forestry - Biology and Forest Typology.

J-2

Abs Jour : Referat Zhur - Biologiya, No 16, 25 Aug 1957, 69081

Author : Vorobev, N.E.

Inst :

Title : The Study of Dead Cover of Veliko-Anadol Forest.

Orig Pub : Nauchn. zap. Dnepropetr. in-t, 1955, 48, 129-239

Abstract : As a basis for classification of types of forest litter we assumed the type of wood stands to be a determining factor in formation of the dead cover in artificial plantings. Depending on the type of planting (shaded, semi-shaded, semi-illuminated and illuminated), types of forest litters are differentiated which are characterized by composition of the fall (in accordance with the nature of plantings). The forest litter of coniferous planting does not create negative conditions for forest growth. Planting of shaded cultures (the composition is stated), especially mixed ones, gives a forest litter which becomes

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J-2

USSR/Forest - Biology and Forest Typology.

Abs Jour : Referat Zhur - Biologiya, No 16, 25 Aug 1957, 69081

a dependable link in a changing medium influencing forest development in the steppes. The same can be said also about the fall from young growth near forests. It is emphasized that forest litter in steppe artificial forests plays a positive role in the life of plantings and must be preserved.

Card 2/2

- 6 -

*Card*  
VOROBEY, A. K.: Master Tech Sci (diss) -- "Repairing worn machine parts by  
hardening by periodic changes in the direction of a direct current". Minsk,  
1958. 16 pp (Acad Sci Beloruss SSR, Phys-Tech Inst), 150 copies (KL, No 6,  
1959, 132)

YUSHKEVICH, Ye.P., kand. tekhn. nauk; VOROBEY, A.K., kand. tekhn. nauk; TRUSHIN, A.M., inzh.; POTAPOV, V.P., inzh., retsenzent; SHISHKIN, G.S., inzh., red.; DROZDOVA, N.D., tekhn. red.

[Centralized freight transportation; experience of railroad and automotive transportation in White Russia] TSentralizovannye perevozki gruzov; opyt zheleznychnoi i avtomobil'nogo transporta Belorussii. Moskva, Transzheldorizdat, 1963. 66 p.  
(White Russia—Freight and freightage)

VOROB'EV, N.

Enterprises of the Sverdlovsk Economic Council improve the  
fulfilling of export orders. Vnesh.torg. 29 no.10;48-50  
'59. (MIRA 12:12)

1. Nachal'nik otdela vneshnikh sushcheniy Sverdlovskogo  
sovmarkhoza.  
(Sverdlovsk Province--Commerce)

VOROBAY, V.V.

133-11-13/19

AUTHORS: Vorobey, V.V. and Zimakov, A.M.

TITLE: Automation of Thermal and Technological Processes in Iron and Steel Works (Avtomatizatsiya teplovykh i tekhnologicheskikh protsessov na predpriyatiyah chernoy metallurgii)

PERIODICAL: 'Stal', 1957, No.11, pp. 1024 - 1027 (USSR).

ABSTRACT: Automatic controlling used in blast furnaces, open-hearth and electric furnaces and rolling mills is outlined. It is pointed out that the progress achieved is to a large extent due to the existence of special organisations grouped in the "Energochermet" Trust: instrument-making factories ("KIP" in Kharkov and "Teplopribor" in Chelyabinsk), the Central Laboratory of Automatics, Central Design Office, etc.

AVAILABLE: Library of Congress  
Card 1/1

KURBEVA, AA

✓ Analytical methods for analyzing mixtures of solvents present in "stabilin." A. A. Kurbeva. Izvestiya Tsvetn. Nauk.-Izdatelstv. Inst. Kombinatsion. Prom. 1932, No. 4, 1-10. Stabilin solvents may contain acetone, Me, Et, iso-Pr, Bu and Am acetates, EtOH, MeOH, iso-PrOH, BuOH, AmOH, benzene, toluene, xylene, gasoline and unsatd. compds. Methods for detg. all these ingredients are discussed and a systematic procedure is recommended. A. A. Boethlingk

Common

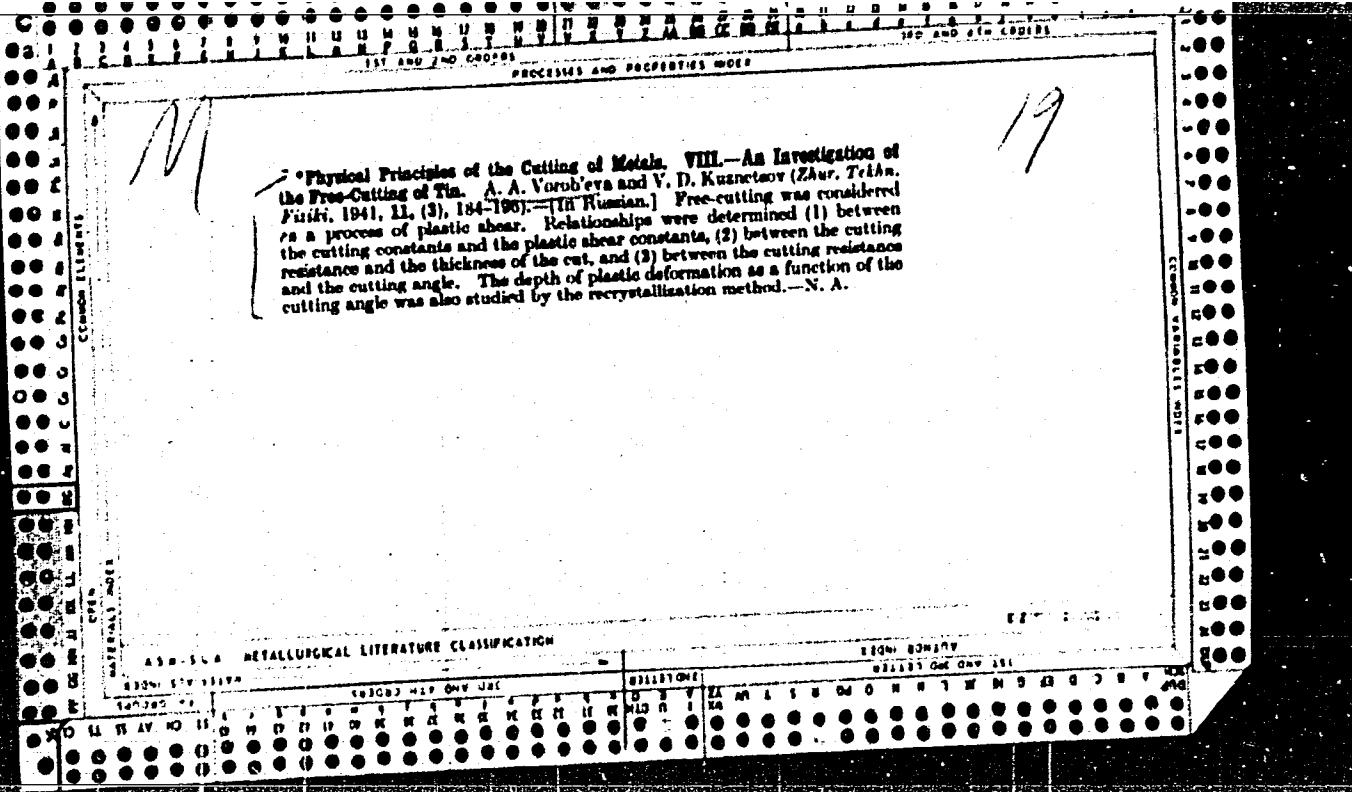
Chemical

Metallurgical

ASA-LSA METALLURGICAL LITERATURE CLASSIFICATION

10

\* Analytical methods for analyzing mixtures of solvents present in "stabilin". A. A. Vorob'eva. Izv. Akad. Nauk. SSSR. Issledovani. Khim. Kondensat. Prom. 1932, No. 4, 11-10. Stabilin admixtures may contain acetone, Al(OH)<sub>3</sub>, Et, iso-Pr, Bu and Am acetates, EtOH, MeOH, iso-PrOH, BuOH, AmOH, benzene, toluene, xylene, gasoline and unstd. compds. Methods for dtg. all these ingredients are discussed and a systematic procedure is recommended. A. A. Schilling



VOROBEVA, A.D.

CP

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Reaction of difficultly soluble salts with phosphoric, arsenic and arsenious acids, and application of these salts for the detection of arsenic and phosphoric acids. A. D. VOROBEVA. J. Applied Chem. (U. S. S. R.) 10, 1081 (1937) (German 3167) (1937). - The reactions of  $\text{BaCO}_3$ ,  $\text{ZnCO}_3$  and  $\text{PbCO}_3$  with  $\text{H}_3\text{AsO}_4$ ,  $\text{H}_3\text{AsO}_3$ , and  $\text{H}_3\text{AsO}_2$  were investigated.  $\text{ZnCO}_3$  and  $\text{BaCO}_3$  cannot be used for sepn. of these acids;  $\text{PbCO}_3$  can be used to sep.  $\text{As}^{(3)}$  and  $\text{PO}_4^{(3)}$  ions from  $\text{As}^{(5)}$  ion, by heating for 15 min. The  $\text{As}^{(3)}$  ion is completely pnd., and the  $\text{As}^{(5)}$  ion is dissolved (80-93%). An analytical scheme is given for detecting the cations of groups 1, 2 and 3 by means of  $\text{PO}_4^{(3)}$  ion, followed by treatment with  $\text{PbCO}_3$  for sepn. of  $\text{PO}_4^{(3)}$  ion. A. A. P.

ASB-11A METALLURGICAL LITERATURE CLASSIFICATION

*Co*

Microvolumetric determination of silicon in soluble silicates. A. D. Vorob'eva. Zavodskaya 7,ab. 8, 1958 (1958).—The detn. of SiO<sub>2</sub> in Na<sub>2</sub>SiO<sub>3</sub> and Na<sub>2</sub>SiF<sub>6</sub> by the method of Kirov and Kaluzhskaya (C. A. 50, 2113) is accurate to 0.0012 mg. for 0.142 mg. SiO<sub>2</sub>. Microchemical determination of silicon in the presence of other compounds. Ibid. 160-7.—The results of the above microanalysis are not affected by the presence of Mn<sup>++</sup>, Cr<sup>+++</sup>, Mo<sup>++++</sup>, W<sup>+++++</sup>, V<sup>++++</sup> and Fe<sup>++</sup>, and are affected by the presence Al<sup>+++</sup> and Fe<sup>+++</sup>. Chas. Blazc.

7

VOROB'EVA, A. F.

"The chemistry of xanthogenates and viscose. IV. Viscose components which add and split off a sulfur atom. Oxidation-reduction sulfur addition". Danilov, S. N., Grad, N. N. and Vorob'eva, A. F. (p. 1257)

SO: Journal of General Chemistry, (Zhurnal Oboshchsei Khimii) 1949, Vol. 19, No. 7.

Changes of the quality of lubricating oils in aviation motors. T. N. Tikholar and A. P. Vorob'ev. *Neftegaz Khoz*, 1938, No. 5, p. 41. Paper are described in detail. Conclusions: (1) The oil undergoes changes in the motor during the first 20 hrs., although retaining its chem. properties even after 50 hrs. (2) Contamination of oil takes place mainly through burned lubricating oil and abraded particles of the motor which collect in the oil. (3) These contaminants modify the properties of the oil. (4) Thus the sp. gr., viscosity, viscosity-temp. index, Sigh no., asphaltene, C and ash contents give excessive values when mech. admixts. and water are present. In the presence of fuel in the oil the viscosity, viscosity-sp. gr. const. and sp. gr. decrease, while the viscosity-temp. index increases. (5) When the oil is dild. with heavy gasoline ends, its viscosity is lowered insignificantly, remaining within the specifications. (6) The stability of the oil after 20 hrs. of work is not lowered up to 50 hrs. It is recommended to filter the oil through paper for the removal of foreign particles. A. A. Bochlinik